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Mentor feedback: Models, viewpoints and strategies

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Abstract

A mentor's feedback can present professional insights to allow a mentee to reflect and develop practice. This paper positions two models for feedback that have emanated from empirical studies. It also demonstrates the diverse viewpoints of mentors and suggests strategies for providing quality feedback. In one qualitative study, 24 mentors observed a final-year preservice teacher through a professionally video-recorded lesson and wrote their observations towards giving feedback to the potential mentee. Tables illustrated in the paper, show that mentors' positive feedback and constructive criticisms vary considerably on the same observed events. Data from this study were synthesised to posit a theoretical model for analysing mentor feedback in an interconnected, three-way Venn diagram, namely: visual, auditory and conceptual frames. Another study ($n=28$), which is a collection of mentor teachers' work samples during the Mentoring for Effective Teaching (MET) program, provides strategies within six feedback practices, that is: (1) negotiated mentor-mentee expectations for providing feedback on practices, (2) reviewing teaching plans, (3) arranging for observations of practices, (4) providing oral feedback, (5) providing written feedback, and (6) presenting opportunities for the mentee to evaluate teaching practices with consideration of the mentor's feedback. For example, on the last mentioned practice (6) there were strategies such as "Plan a time for evaluation of practices (guided reflection)", "Read the mentee's reflection on practice and discuss how it aligns with your observations of their practices", and "Highlight verbally and/or in writing where the mentee is perceptive about the reflection and how the reflection could be enhanced for future evaluations". Developing a range of strategies that may assist the mentee in professional growth, include enlisting a community of mentors, ensuring mentors have a repertoire of strategies for articulating

feedback, and using mentor feedback tools and models. This study has implications for the development of feedback models and strategies.

Keywords: mentoring, teaching strategies, teaching approaches

Introduction

Mentors are paramount for guiding mentees' teaching practices. Through observation, mentors can provide quality feedback on positive aspects of their mentees' development and areas that require further improvement. Indeed, a mentor teacher draws conclusions about a mentee's teaching towards providing feedback predominantly through observations of practice, particularly observing a mentee teach in the classroom. This paper presents two models associated with providing feedback, namely: (1) a model of feedback across six feedback practices, and (2) the dimensions of mentors' observations for feedback.

Literature review

There are many aspects of a mentee's teaching practices that a mentor could observe. For example, observations around pedagogical knowledge practices (e.g., Hudson, 2013a) may allow for informative feedback. Mentors could observe how the early-career teacher engages and motivates students into learning about a topic (e.g., Broek & Kendeou, 2008). All facets of an early-career teacher's practice may come under scrutiny, such as enthusiasm for teaching (Tauber & Mester, 2006), positive attitude for teaching (Ediger, 2002; Wong, Britton, & Ganser, 2005), or establishing clear and coherent goals that can orientate students' inquiry (Seidel & Prenzel, 2004). Whatever early-career teachers do in the classroom can be within the mentor's observational scope.

The feedback from mentors can allow mentees to synthesise and evaluate themselves towards developing a professional identity. For instance, one study (Harrison, Lawson, & Wortley, 2005) explains how the mentor's questioning of a mentee enhances reflective thinking for developing pedagogical practices. Another study (Sempowicz & Hudson, 2011) shows how mentors' feedback can translate into advancing mentees' pedagogical practices. Wiggins (2012) outlines that "helpful feedback is goal-referenced; tangible and transparent; actionable; user-friendly

(specific and personalized); timely; ongoing; and consistent” (p. 13). He continues on to say that feedback needs to be “stable, accurate and trustworthy” (p. 13). Importantly, feedback must be aimed at advancing practices and, for early-career teachers in particular, lead towards developing a teacher identity consistent with system expectations.

Theoretical frameworks

Self identity and mentor feedback

In the occupation of teaching, as in other occupations, self awareness appears to be pivotal in forging a self-identity (Duval & Wicklund, 1973). In self-identity theory, Carver and Scheier (1981) outline two types self-awareness, that is: the private self and the public self. Teaching is very much a public occupation, particularly as teachers engage with a wide range of people (students, staff and the wider community). This infers that teachers forge identities through symbolic interactionism arising from social interactions (e.g., Cooper & Olson, 1996), which Vygotsky (2012) also coins as social constructivism. Festinger’s (1954) social comparison theory posits self identity around comparing oneself with others while self-categorisation theory (see Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) is the process of feeling like a member of a group. Teachers with a strong sense of self identity compare themselves to other teachers and generally want to feel like they are part of the profession. Indeed, developing an identity requires a social setting, building self esteem and recognition of oneself in an environment (Ashforth & Mael, 1989). In forging a self identity, viewing oneself without understandings from others may be fraught with considerable subjectivity and bias; hence feedback is intended to facilitate reflective thinking for professional growth (Schön, 1987) and promoting a professional self identity.

Early-career teachers (preservice teachers and beginning teachers) are new or relatively new to the profession and their self awareness and development of a self identity as teachers will be in formative stages. The feedback provided by effective mentors can allow the early-career teacher to reflect on practices for professional growth, thus contributing to a professional self identity. Mentor feedback frameworks or models tend to be around success criteria provided by universities, which usually involves checking boxes and/or writing comments. These processes are valuable for determining a mentee’s level of achievement. Nevertheless, mentors report that

their feedback to mentees is variable (Hudson, 2010). Hence, mentors also need to consider how they observe teaching practices and how they can provide feedback to their mentees. The research question for this study was: How can mentors observe and provide feedback to mentees? More specifically, what strategies can mentors employ to provide feedback and what framework may be used to determine *how* mentors provide feedback?

Research Design and Findings: Case Study One

This qualitative study is divided into two case studies (Denzin & Lincoln, 2011), each focused on a mentor-mentee feedback model. The first study focuses on a factor (Feedback) from a mentoring (Hudson, 2004) emanating from the literature and empirical evidence, and will be explored in terms of the types of strategies mentors advocate within this conceptual framework. It should be noted that “mentoring preservice teachers” (and other associated terms such as mentor, mentor teacher, mentee) can be viewed differently from supervising preservice teachers or supervising student teachers. For instance, “mentor teacher” is used in this paper instead of supervising teacher, as the term mentor teacher provides an identity that aims to facilitate a role around mentoring rather than supervision alone. The selection of mentoring terms aims to reduce confusion in role delineation and simultaneously enhance role expectations. Supervision and coaching may be viewed as a one-way process with the supervisor or coach in a more powerful role, while the mentoring role can be considered as a two-way learning and sharing process; it can be considered as more holistic and nurturing to encompass the mentor’s personal attributes, mentoring system requirements, articulating pedagogical knowledge, modelling of teaching practices, and providing feedback to the mentee. The second case study focuses on a *mentor observation model* (Hudson, 2014) as a subset of one practice within the first model (observe) and will analyse what and how mentors observe for providing feedback.

The “Feedback” factor as a model presents six mentoring practices, that is: negotiating expectations, reviewing teaching plans, observations of teaching practices, providing oral feedback, providing written feedback, and feedback around the mentee’s evaluation of teaching practices. Negotiating expectations around the feedback is essential before providing feedback. Both the mentor and mentee need to have a clear understanding of the proposed feedback parameters (e.g., feedback around pedagogical practices). There should be opportunities for the

mentee to seek advice about the teaching plans, as this provides a way for advancing the teaching plans prior to teaching. As a scientific tool, observation of practice will allow the mentor to focus directly on the mentee's teaching. Oral feedback can be delivered more timely and fluently after an observation (Bunton, Stimpson, & Lopez-Real, 2002; Sempowicz & Hudson, 2011), while written feedback formalises the process as a type of contractual arrangement for advancing teaching practices (Lock, Soares, & Foster, 2009). Importantly, mentees need to reflect on the teaching practices, which can be provided to the mentor in the form of a written evaluation (Korthagen, 1993; Valencic & Vogrinc, 2007). This may also help to determine what early-career teachers learn from their mentors; although researchers (Rajuan, Beijaard, & Verloop, 2008) claim that learning from the mentor "remains an unanswered question" (p. 131). Nevertheless, understanding how mentors provide feedback and what they observe in a mentee may present insights into feedback parameters.

The *mentor observation model* focuses on how and what mentors observe during a teaching episode. The model posits that mentor observations occur within three theoretical dimensions, namely: (1) visual, (2) auditory, and (3) conceptual. These dimensions can be represented by a Venn diagram, as various observations have the potential to overlap across the dimensions. The purpose of this paper is to outline feedback strategies and present ways in which a mentor observes towards providing feedback.

Case study one gathered data during a one-hour session within a two-day Mentoring for Effective Teaching (MET) program (see www.tedd.net.au). Mentor teachers' ($n=28$) strategised on the six aforementioned feedback practices and wrote their responses as they discussed strategies in small groups of four to six participants. These strategies will be presented within the following six feedback practices.

Establishing expectations

Mentor teachers were asked about strategies that may assist with establishing expectations for feedback on the mentee's practices. Mentors were clear that expectations needed to be focused on all aspects of teaching practices that matched the expected teaching level of the mentee. To illustrate one mentor wrote: "Outline your expectations for the mentee's lesson planning,

teaching, assessment, and reflection”, which another mentor elaborated “needs to be relevant to the mentee’s developmental level”. However, ensuring that expectations are commonly held was highlighted as the most important strategy. That is, it was argued that the mentor and mentee need to share their expectations about what they want as a process for providing feedback with common agreement on procedures and feedback practices, also articulated as process of negotiation, for example: “Negotiate clear expectations with roles and responsibilities”. Mentors wrote other specifics about expectations, including “Discussing what it means to be a professional for teaching students”.

Review lesson plans

Reviewing lesson plans was considered by the mentor teachers an essential preliminary feedback action aimed at confirming teaching practices and at the same time allowing for amendments to the plan prior to teaching. It was highlighted that any feedback on a mentee’s teaching plans needed to occur in sufficient time where the mentee has an opportunity to amend the plans with confidence. One mentor pointed out that reviewing a lesson plan immediately prior to teaching the lesson may diminish the mentee’s confidence. Mentors suggested the use of astute questioning as a process to advance the teaching plans, for instance, “encourage the mentee to reflect on the lesson plan prior to teaching using guided questions”. Although mentors outlined the necessity of providing positive and constructive feedback about the lesson plan structure (introduction, body, conclusion), mentor comments were strongly related to providing feedback that linked to pedagogical knowledge practices such as preparation, teaching strategies, classroom management, and assessment. In addition, several mentor teachers explained how it was a valuable feedback practice to review the lesson plan after teaching “by asking pertinent questions (e.g., what did you think worked well in that lesson? How was your classroom management? How would you improve the lesson for future teaching practices?)”. Reviewing plans before and after teaching through guided questioning aimed facilitate reflection on practice and hence opportunities for pedagogical growth.

Observe

Providing feedback requires observation of teaching practices. Mentors suggested “making formal arrangements for observing the mentee’s lessons” on the basis that this strategy ensures

that mentees are provided with formal observations. There were also suggestions around discussing “informal observations of practice”, where conversations can occur with the mentee at later stages. Importantly, mentor teachers wanted a focus on observing selected (and previously negotiated) pedagogical knowledge practices. For instance, they claimed that more intense observations could occur if the mentor focused only on classroom management or teaching strategies rather than attempting to observe all the teaching practices. It was articulated that some mentors have a tendency to interrupt the flow of a lesson by talking to the class around lesson details, instead of allowing for the lesson to proceed according to the previously negotiated mentee’s lesson plan. Despite the notion of observing the mentee teach without intervention, there mentor teachers indicated some exceptions, which included issues around students’ health and safety, or when a lesson goes beyond the mentor’s boundaries of acceptance (e.g., unfavourable student behaviour).

Oral feedback

Oral (verbal) feedback was indicated by mentor teachers as a way to provide positive and constructive comments expediently. It was outlined that oral feedback could be presented formally and informally. That is, oral feedback can be articulated formally before and after designated lessons, particularly in reviewing a mentee’s teaching plans; while informal feedback can occur more spontaneously and at pivotal moments, whereas written feedback would require more time. Importantly, these mentors highlighted that using personal attributes (e.g., being supportive, listening, instilling confidence) was essential for facilitating oral feedback.

Written feedback

It was clear that written feedback formalised the process, similar to a contractual agreement between two parties. Mentor teachers suggested that written feedback formally recognises the mentee’s pedagogical achievements while guiding the mentee towards reflecting and improving practices. Mentors claimed that written feedback can occur around the mentee’s planning, teaching, assessment and reflection with links to pedagogical knowledge practices (e.g., classroom management, teaching strategies, questioning). Written feedback can formalise the standard achieved by the mentee with a further focus on expectations for improving practices. It was expected that the mentor’s written feedback would be translated into action with the mentee

implementing the mentor's advice in subsequent lessons. It was also suggested that the mentor should write about the mentee's written reflections to affirm or dispute diplomatically the mentee's claims.

Evaluate (Guided self reflection)

Development of teaching practices requires reflection that can lead to future pedagogical advancements (Schön, 1987). Mentor teachers emphasised the importance to "read the mentee's reflection on practice and discuss how it aligned with your observations of their practices". Another mentor wrote, "Highlight verbally and/or in writing where the mentee is perceptive about the reflection and how the reflection could be enhanced for future evaluations". There were comments that focused on guiding the reflective practices, such as "Discuss with the mentee their evaluation of practices in relation to pedagogical knowledge and modelling, including the level of activity and engagement, and differentiated learning". Once more, the mentor's personal attributes was underlined to "ensure the mentee is valued within the feedback in order to build confidence". Although reflections on practice "Set further expectations for future teaching", "Reflection on practices should also reflect the expectations outlined at the beginning of the process".

Research Design and Findings: Case Study Two

Case study two analyses 24 mentor teachers' written notes devised when observing a final-year preservice teacher's video-recorded lesson. Without guidance, the mentors were asked to notetake feedback as they would normally undertake when observing a preservice teacher. The 24 feedback responses (notes made by the mentors during the lesson observation) were collated into commonalities (Creswell, 2014). Single responses were also reported in this study to determine the peripheral of mentors' observations.

This case study (see also Hudson, 2014) presented a simulated activity involving a professional video recording of an Earth science lesson at a private high school with a final-year preservice teacher undertaking his final four-week practicum. He was teaching a Year 8 class on the topic of "rocks" and was video-recorded by a private media company (including sound engineer, camera man, and producer). He had prepared his lesson without consultation with the video

company or researchers, as this lesson was considered part of his usual teaching program. This preservice teacher taught this lesson to two other Year 8 classes and will teach this lesson a total of five times during the week. The lesson was conducted over 2 x 45 minute periods, which was then edited onto a DVD with a total of 5 minutes and 50 seconds for the purposes of analysing key aspects of the mentee's lesson. That is, the introduction, body and conclusion of the lesson remained as sequential events and allowed sufficient exposure for viewers to analyse teaching practices during these sections.

The DVD of his Year 8 science lesson was presented to a group of mentor teachers ($n=24$). Within the one room sitting apart from one another, each mentor was asked to view the lesson and record notes as if being the preservice teacher's mentor observing his practices. At the conclusion of the video, the mentor teachers were given three minutes to finalise their feedback (considered somewhat representative of a real-world situation before they would normally enter into discussion with the mentee after the class has been dismissed).

Findings revealed variation in mentors' observations on the mentee's practices. In a simulated experience, these mentors' written notes indicated both positive feedback around the mentee's teaching and constructive criticisms for the mentee to improve practices. Mentors' recorded observations of both positive and constructive criticisms were clustered around three broad theoretical themes, namely: (1) visual, (2) auditory, and (3) conceptual. Mentors' positive comments and constructive criticisms will be analysed in relation to these three themes.

Positive feedback

When providing positive feedback mentors observed four distinct visual cues, that is, teacher movement, preparation, Information Communication Technology (ICT) visuals, and use of the whiteboard. There were seven auditory signals associated with positive feedback (questioning students, use of students' names, providing clear instructions, brainstorming prior knowledge, praising students, paraphrasing students' responses to questions, and projecting a clear voice). There were also seven cues combining visual and auditory observations that involved displaying and articulating: lesson aims/goals, monitoring groups, time management, behaviour management, revision of previous lesson, hands-on activity, and enthusiasm. Yet two

observations extended beyond visual and auditory cues to incorporate conceptual or abstract considerations such as the mentee using the inquiry approach and the structure of the lesson, while lesson content knowledge appeared to incorporate all three broad dimensions (Figure 1).

Every mentor response was included in this study, including single observations not aligned with other mentors' observations to determine the breadth of the observations. As a visual observation, teacher movement during the introductory phase of the lesson was observed and recorded as being favourable by 15 mentors (e.g., Mentor 6's comment was representative of the others: "I liked how you moved around the classroom instead of staying in one spot at the front"). Half the mentors listened to the mentee's questioning, with positive feedback about "open-ended questions, as well as scaffolding ideas and making observations" (Mentor 1), "cueing types of responses" (Mentor 16), and "good questioning of chn's [children's] use of rocks and why... talked about closed-open questions – good use of both" (Mentor 21). Interestingly, only 5 out of 24 mentors (1, 7, 12, 23, 24) recorded observations about both questioning and monitoring groups (Table 1).

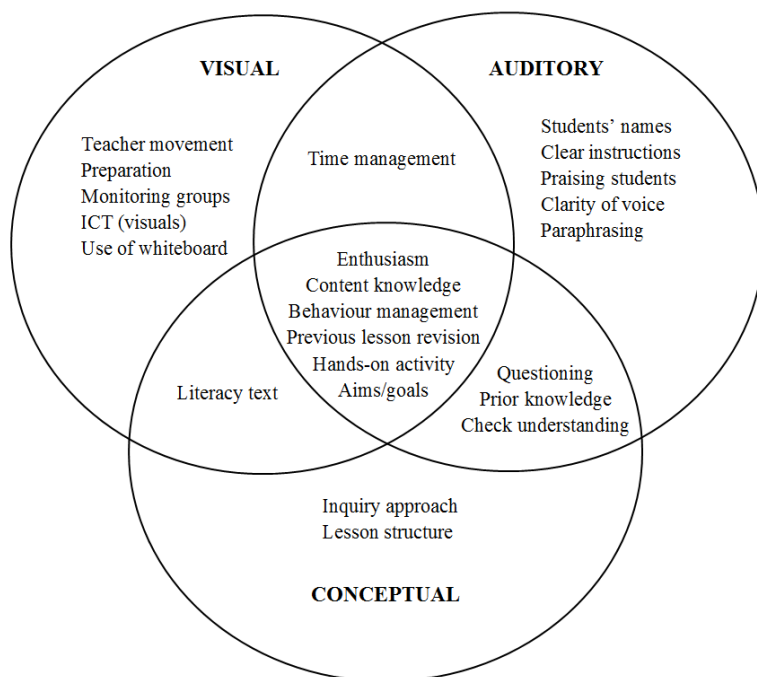


Figure 1. Examples of the mentee's feedback within the three dimensions

Time management appeared significant in mentors' auditory observations as a positive mentee practice where ten mentors recorded comments such as the preservice teacher: "advised students with expectations of working within a time limit" (Mentor 1), and "provided a clear timeframe to complete work" (Mentor 22). Nine mentors recorded their observations (visual, auditory, and conceptual) about the effectiveness of the mentee's behaviour management, for example: "Behaviour management – didn't stop whole class and instead just used eye contact and said 'girls' in a quite quick voice" (Mentor 1), and "cueing types of responses with 'hands up' and 'when I tell you to move' was a strength" (Mentor 16).

Although seven mentors recorded visual observations of the use of ICT as a positive practice (e.g., "good use of pictures and ICT to engage your learners", M21), five or less mentors focused on other teaching elements such as brainstorming prior knowledge, using a hands-on activity, praising students, having a clear teaching voice, and a range of singular comments from mentors (e.g., paraphrasing students' responses, demonstrating enthusiasm for teaching, and checking for understanding; Table 1). Surprisingly, only one mentor (M13) focused specifically on lesson content knowledge as a positive practice, despite the significant literature around preservice teachers requiring adequate content knowledge to teach in schools (e.g., see Goodrum, Hackling, & Rennie, 2001). It would appear that mentors may not consider the preservice teacher's content knowledge as an important focus for observation or it may be more difficult to determine during lesson observations. Similar to other conceptual observations, observations of content knowledge can represent an abstract understanding, and enthusiasm, behaviour management and previous lesson revisions may also be abstract and can incorporate observable visual and auditory clues (Figure 1). There are grey shaded boxes in Table 1 where mentors indicated the mentee's most positive practice (an area of strength). Half the mentors outlined two areas of significant strength (e.g., Mentors 5, 8, & 10).

Constructive criticisms

Nearly all mentors' constructive criticisms appeared mainly as a result of the mentors' auditory dimension (e.g., complex instructions, more "wait time", voice tone/volume, paraphrasing, vocabulary scaffolding, language usage). Although no mentor recorded any more than four constructive criticisms, eight mentors had only one critical comment while five mentors'

comments did not align with anyone else's criticisms (questioning, discussion time, assessment, whiteboard work, language usage, Table 2). The highest correlated observation was focused on the mentee's provision of complex instructions with critical comments such as: "There was too much information without recapping on directions for the tasks" (Mentor 7) and Mentor 8 also claimed that there was "too much information at the same time". Even so, this view was articulated by half the mentors, signifying that at best only half the mentors may concur with each other's observations.

There were contradictory observations recorded in mentors' feedback where 9 mentors had claimed the mentee's instructions were clear while 12 stated the instructions were too complex. Indeed, four mentors (7, 8, 13, 22) claimed the instructions were both clear (positive) and complex (constructive criticism). These contradictions would need to be explained through interviews with participants in a follow-up study. Similarly, 12 mentors observed the mentee's presentation of the aims of the lesson as positive while 3 claimed this as a criticism. More than half the mentors ($n=15$) highlighted teacher movement as a positive while two mentors recorded this observation as disconcerting pacing around the room. Conflicting information provided by these mentors can be noted in how three mentors (1, 6, 22) claimed the mentee's voice was a positive aspect of the teaching while two mentors (9, 10) highlighted this as an area for improvement. In addition, contrasting observations were made when the mentee paraphrased students' responses and his use of the whiteboard (Tables 1 & 2). The number of constructive criticisms was around one third of the total positive comments, with a total of 146 positive comments and a total of 52 constructive criticisms from the 24 mentors.

Discussion

The findings in Case Study One illustrated how mentors devised strategies for providing feedback across the six practices (i.e., expectations, reviewing plans, observations, oral feedback, written feedback, and evaluation of teaching). Understanding that there are feedback practices is one aspect; however mentors also need to strategise on ways for actioning the feedback. Ensuring shared expectations with common agreement on procedures and feedback practices was inferred to assist in understanding roles and responsibilities for both mentor and mentee. Reviewing teaching plans requires the mentor to have knowledge about lesson structures with an

ability to ask astute questions that draw from the mentee responses linked to pedagogical improvements. There are questioning frameworks, such as ORID questioning techniques (Stanfield, 2000), that could be employed to assist mentors. Astute questioning can allow the mentee to analyse practices towards a reconceptualisation of practice. It is paramount that observations have been arranged previously between the mentor and mentee so that both understand the focus of observation, which can later present focused dialogues to facilitate deeper understandings about teaching practices. There are ways to provide timely oral and written feedback based on expectations (goal referenced, tangible and transparent, see also Wiggins, 2012) by drawing on the mentor's personal attributes to maintain a supportive learning environment for the mentee. It was emphasised repeatedly that the mentor's feedback had to be constructive and thus instilling confidence and positive attitudes for advancing teaching practices. The mentor's personal attributes need to be consistent towards building the mentee's powers of self reflection. A key strategy indicated in this case study was for the mentor to model self reflection after modelling the teaching of a lesson to the mentee. Indeed, mentoring preservice teachers encompasses other roles that may not be visible under the term supervision. It was suggested strongly that the mentor's open and honest appraisal of a lesson would facilitate similar actions from the mentee after teaching a lesson.

The findings for Case Study Two demonstrated variability in mentors' recorded observations for providing feedback with no two mentors' records being the same (see also Hudson, 2013b). Such variability of observations warrants a multifaceted approach (Tillema, 2009) with a community of mentors (Hudson, 2013a) to be utilised for observing and providing professional opinions on preservice teachers' practices. Feedback from independent mentors may help the mentee to determine commonalities in mentors' feedback and prioritise areas of significance for pedagogical development. The findings in this study imply that quality feedback needs to come from multiple perspectives where mentors can verify opinions (e.g., Kimball, 2002; Lock et al., 2009). As a preservice teacher is allocated to a classroom for a block of time (e.g., four weeks), there can be multiple opportunities for a mentor to enlist colleagues for their opinions on the mentee's practices. Mentor-mentee conversations are designed to scaffold the mentee's learning about how to teach (Timperley, 2001). Multiple perspectives can assist mentees to reflect on the commonalities of mentor responses within the observational dimensions (viz: visual, auditory

and conceptual) towards indicating a reality. However, ontological perspectives based around the nature of reality were not elucidated in this study. Instead, this study aligns with constructivist viewpoints where multiple realities can be constructed by observers (see Denzin & Lincoln, 2011; Hatch, 2002). Thus, more methodical approaches on observations for purposes of providing feedback are needed (see also Harrison et al., 2005).

In one sense, these mentors acted as ethnographers observing the preservice teacher's practices, providing descriptive accounts of behaviour. They also attempted to provide focused observations "where they could with some confidence discern the relevant from the irrelevant" (Angrosino & Rosenberg, 2011, p. 468). Although reasons for mentors' confidence in their observations needs further investigation, their teaching experiences, knowledge of the classroom and students, and previous experiences with preservice teachers may be pathways for having confidence in their observations (see also Bandura, 1986). Angrosino and Rosenberg point out that focused observation "almost always involved interviewing because researchers could not rely on their own intuition to make such discernments" (p. 468). Yet in this simulated activity of mentors observing a video of a preservice teacher in practice, there appeared no single method for maximising observational accounts and minimising mentor bias to determine valid and reliable results (see also Gold, 1997). In addition, mentors had not verified their observations with an opportunity to interview the preservice teacher through a mentor-mentee dialogue. The variability of mentor observations tends to suggest that a more systematic step of "selective observations" may produce more consistent results between mentors (Angrosino & Rosenberg, 2011, p. 468); however this is an aspect requiring considerable research.

Although not obvious in this current study, and in addition to the three dimensions for observation (visual, auditory, and conceptual), there may be an emotional dimension when categorising mentor observations for feedback but this would require investigation. The limitations of the study include: (1) the quality of each mentor's recorded observations was not determined; (2) feedback was not analysed on how it may have stimulated the mentee's reflection on practice, which is apparently a key aim of mentors' observations (e.g., Rajuan et al., 2008; Schön, 1983, 1987), and (3) the mentoring experience levels of individual mentors were

not aligned with the written observations to determine whether more experienced mentors may have recorded similar observations.

Conclusion

This study outlined 28 mentors' strategies for providing feedback. A bank of strategies for providing feedback was deemed to be useful in the mentoring process and such strategies can aid in guiding the mentor's role. As one aspect of the feedback model (observation), this study also investigated 24 mentors' observations on one preservice teacher's science lesson where they had written notes ready for oral feedback to the mentee. Mentors presented feedback on the preservice teacher's practices after observation; yet their feedback from observations varied considerably. Further studies are needed to determine how mentors can be provided with observational tools to facilitate greater consistency between mentors' observations. Mentors' views also need to be sought on what they deem to be important for preservice teacher development. Further qualitative research is also required to determine the connection between a mentor's philosophy of teaching (and mentoring) and what may align with their observations of teaching practices. This may help to understand in which ways the mentor's bias is connected to the feedback provided. For instance, an English teacher may focus on the mentee's language more strongly than a science teacher, which has implications when presenting feedback.

This study makes a theoretical contribution to mentoring by identifying three dimensions for mentor observations (i.e., visual, auditory, and conceptual), which will require further exploration to understand the range of observations of practices that may reside within each dimension. Devising "observations of practices" could be developed into a self-evaluative tool for mentors for understanding their observational foci. Furthermore, investigations can include the specific observations articulated to the mentee that make a difference to the mentee's teaching practices; hence tracking the mentor's feedback to the mentee's practices to student outcomes, which will provide crucial links to the effects of mentoring for effective teaching. Finally, it can be argued that mentors, in their observational roles of preservice teacher behaviour, become ethnographers; nevertheless they are likely to be untrained in data collection and analytics. Mentor education programs may need to embed succinct and pertinent ethnographic training that focuses on observational tools with ways to analyse preservice teacher

practices. Such professional development may also open prospects for mentor involvement in higher degree studies at the tertiary level, which could generate more research in this field.

References

- Angrosino, M., & Rosenberg, J. (2011). Observations on observations: Continuities and challenges. In N. K. Denzin & Y. S. Lincoln. *The SAGE handbook of qualitative research*, (pp. 467-478). Thousand Oaks, CA: SAGE Publications.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, 14(1), 20-39.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Broek, P. V. D., & Kendeou, P. (2008). Cognitive processes in comprehension of science texts: The role of co-activation in confronting misconceptions. *Applied Cognitive Psychology*, 22, 335–351.
- Bunton, D., Stimpson, P., & Lopez-Real, F. (2002). University tutors' practicum observation notes: Format and content. *Mentoring and Tutoring*, 10(3), 233–44.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer-Verlag.
- Cooper, K., & Olson, M. R. (1996). The multiple 'I's' of teacher identity. *Changing research and practice*, 78-89.
- Creswell, J. W. (2014). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th Edn.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The SAGE handbook of qualitative research*. Thousand Oaks, CA: SAGE.
- Duval, S., & Wicklund, R. A. (1973). Effects of objective self-awareness on attribution of causality. *Journal of Experimental Social Psychology*, 9(1), 17-31.
- Ediger, M. (2002). Assessing teacher attitudes in teaching Science. *Journal of Instructional Psychology*. FindArticles.com. 27 May, 2009.
http://findarticles.com/p/articles/mi_m0FCG/is_1_29/ai_84667404/
- Festinger, L. (1954). A theory of social comparison processes. *Human relations*, 7(2), 117-140.
- Gold, R. L. (1997). The ethnographic method in sociology. *Qualitative Inquiry*, 3, 388-402.

- Goodrum, D., Hackling, M., & Rennie, L. (2001). *The status and quality of teaching and learning in Australian schools*. Canberra, Australia: Department of Education, Training and Youth Affairs.
- Harrison, J., Lawson, T., & Wortley, A. (2005). Facilitating the professional learning of new teachers through critical reflection on practice during mentoring meetings. *European Journal of Teacher Education*, 28(3), 267-292.
- Hatch, J. A. (2002). *Doing qualitative research in educational settings*. Albany: State University of New York Press.
- Hudson, P. (2004). Specific mentoring: A theory and model for developing primary science teaching practices. *European Journal of Teacher Education*, 27(2), 139-146.
- Hudson, P. (2010). Mentors report on their own mentoring practices. *Australian Journal of Teacher Education*, 35(7), 30-42.
- Hudson, P. (2013a). Strategies for mentoring pedagogical knowledge. *Teachers and Teaching: Theory and Practice*, 19(4), 363-381. DOI:10.1080/13540602.2013.770226
- Hudson, P. (2013b). Feedback consistencies and inconsistencies: Eight mentors' observations on one preservice teacher's lesson. *European Journal of Teacher Education*. DOI:10.1080/02619768.2013.801075
- Hudson, P. (2014). Identifying mentors' observations for providing feedback. *Teachers and Teaching: Theory and Practice*.
- Kimball, S. M. (2002). Analysis of feedback, enabling conditions and fairness perceptions of teachers in three school districts with new standards-based evaluation systems. *Journal of Personnel Evaluation in Education*, 16(4), 241-68.
- Korthagen, F. (1993). The role of reflection in teachers' professional development. In H. Kremer-Hayon, C. Vonk & R. Fessler (Eds.). *Teacher professional development: A multiple perspective approach*, (pp. 133-145). Amsterdam: Swets & Zeitlinger.
- Lock, R., Soares, A., & Foster, J. (2009). Mentors' written lesson appraisals: The impact of different mentoring regimes on the content of written lesson appraisals and the match with pre-service teachers' perceptions of content. *Journal of Education for Teaching*, 35(2), 133-143.
- Rajuan, M., Beijgaard, D., & Verloop, N. (2008). Student teachers' perceptions of their mentors as internal triggers for learning. *Teaching Education*, 19(4), 279-292

- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Seidel, T., & Prenzel, M. (2004, April). *Teaching patterns and student learning in physics instruction: The interplay of theory, design and methods in a videotape classroom study*. Paper presented at the annual meeting of American Educational Research Association (AERA), San Diego, CA.
- Sempowicz, T., & Hudson, P. (2011). How can a mentor's personal attributes and pedagogical knowledge develop a preservice teacher's behaviour management? *International Journal of Learning*, 18(1), 303-314.
- Stanfield, R. B. (Ed.). (2000). *The art of focused conversation: 100 ways to access group wisdom in the workplace*. New Society Publishers.
- Tauber, R. T., & Mester, C. S. (2006). *Acting lessons for teachers: Using performance skills in the classroom*. Westport, CT: Praeger Publications.
- Timperley, H. (2001). Mentoring conversations designed to promote student teacher learning. *Asia-Pacific Journal of Teacher Education*, 29(2), 111-123.
- Tillema, H. H. (2009). Assessment for learning to teach: Appraisal of practice teaching lessons by mentors, supervisors, and student teachers. *Journal of Teacher Education*, 60(2), 155-167.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Valencic, M., & Vogrinc, J. (2007). A mentor's aid in developing the competences of teacher trainees. *Educational Studies*, 33(4), 373-384.
- Vygotsky, L. (2012). *Thought and language: Revised and expanded edition*. Cambridge, MA: The MIT Press.
- Wiggins, G. (2012). 7 keys to effective feedback. *Educational Leadership*, 70, 11-16.
- Wong, K., Britton, T., & Ganser, T. (2005). What the world can teach us about new teacher induction. *Phi Delta Kappan*, 86(5), 379-384

Table 1: *Mentors' (n=24) positive feedback on the mentee's lesson*

Positive Feedback	Σ	1*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Teacher movement	15	✓				✓	✓		✓	✓	✓	✓		✓		✓		✓	✓		✓	✓	✓	✓	
Aims/goals	12	✓	✓		✓	✓	✓	✓	✓	✓		✓						✓		✓					✓
Questioning	12	✓		✓	✓		✓	✓	✓	✓						✓	✓	✓			✓	✓			
Preparation	11	✓		✓	✓			✓					✓	✓	✓				✓		✓			✓	✓
Monitoring groups	11	✓				✓		✓	✓		✓	✓	✓						✓				✓	✓	✓
Time management	10	✓	✓						✓	✓				✓			✓	✓		✓			✓		✓
Students' names	10				✓	✓		✓			✓	✓		✓	✓	✓			✓				✓		
Clear instructions	9	✓	✓	✓	✓			✓	✓	✓				✓									✓		
Behaviour management	9	✓		✓		✓		✓		✓							✓		✓	✓				✓	✓
Previous lesson revision	8	✓		✓		✓	✓	✓	✓						✓	✓									
ICT (visuals)	7			✓	✓		✓	✓			✓		✓									✓			
Prior knowledge	5			✓			✓		✓			✓		✓											
Hands-on activity	5											✓	✓			✓							✓	✓	
Praising students	5	✓				✓				✓													✓		✓
Inquiry approach	4				✓									✓	✓						✓				
Lesson structure	3										✓											✓	✓		
Clear voice	3	✓					✓																✓		
Paraphrasing	2																		✓						✓
Content knowledge	1													✓											
Literacy focus	1															✓									
Use of whiteboard	1																		✓						
Enthusiasm	1															✓									
Checking for understanding	1								✓																
Σ per mentor		10	3	7	7	7	6	9	9	7	5	6	4	8	4	7	3	4	5	5	4	4	8	5	7

* Mentor

NB: A grey shaded area signifies the mentee's strongest area as determined by that mentor's observation.

Table 2: *Mentors' (n=24) constructive criticisms about the mentee's lesson*

Critical feedback	Σ	1*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Complex instructions	12					✓	✓	✓	✓					✓				✓	✓	✓	✓		✓	✓	✓
Tempo of lesson (rushed)	5					✓			✓			✓		✓					✓						
Instructions before moving	4			✓				✓														✓		✓	
Checking for understanding	4		✓																✓			✓			✓
More student input	4								✓	✓				✓									✓		
Unclear aims/goals	3										✓						✓						✓		
More “wait time”	3					✓				✓		✓													
Teacher movement	2														✓		✓								
Lesson structure	2											✓					✓								
Voice tone/volume	2									✓	✓														
Called student “mate”	2	✓											✓												
Paraphrasing	2				✓												✓								
Vocabulary scaffolding	2			✓															✓						
Questioning	1																						✓		
Discussion time	1									✓															
Assessment	1								✓																
Whiteboard work	1											✓													
Language usage (e.g., gonna)	1																			✓					
Σ per mentor		1	1	2	1	3	1	2	4	4	2	4	1	3	1	2	2	1	4	2	1	2	4	2	2

* Mentor